Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Protocol summary

Study aim

The main purpose of this study is to investigate the effect of consuming sports energy drinks on hematological indicators, renal function, and the Rated Perceived Exertion of football players during football matches.

Design

The design of the present study includes a cross-sectional design, semi-experimental field, one-blinded in which 22 male soccer players were selected by the available sampling method. Fasting blood samples will be taken 5 days before a 90-minute football match, before the start of the game, at the end of the 90-minute match, and one day after the match in two stages. All participants will drink 2 250 ml Hype Sports Drinks at regular intervals. Then, after two weeks of rest, all of the above conditions will be repeated once again using a placebo that contains sucrose water.

Settings and conduct

After calling, first, a briefing session will be held for the volunteers to describe the research program, and the written consent form, physical activity preparation questionnaires, health screening, and personal information will be completed. The present research will be conducted on a football field in the city of Masal. Participants are not aware of the contents of the beverage bottle in two stages.

Participants/Inclusion and exclusion criteria

Inclusion: Gender (male) Age (18 to 30 years) Sports history (at least 5 years) Exclusion: Smoking ingestion of energetic supplements in the past 1 months having a history of cardiovascular disease Having a history of musculoskeletal diseases Having a history of neurological and hormonal diseases No history of surgery

Intervention groups

Energy drink group Placebo group

Main outcome variables

Renal function variables (urea; creatinine) Serum level of hematological indicators (hemoglobin mass; hematocrit percentage; and red and white blood cell count) Rated Perceived Exertion

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20180503039517N9**
Registration date: **2021-02-01, 1399/11/13**
Registration timing: **prospective**

Last update: **2021-02-01, 1399/11/13**
Update count: **0**

Registration date

2021-02-01, 1399/11/13

Registrant information

Name

Soleyman Ansari Kolachahi

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 13 3375 2906

Email address

solomonansari@phd.iaurasht.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2021-02-18, 1399/11/30

Expected recruitment end date

2021-03-10, 1399/12/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date
empty

Scientific title
The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Public title
The effect of sports drink consumption on some hematological indicators, renal function and perception of difficulty in football players

Purpose
Other

Inclusion/Exclusion criteria
Inclusion criteria:
Age (18-30 years) Gender (male) Have at least 5 years of football training experience
Exclusion criteria:
Smoking ingestion of energetic supplements in the past 1 months having a history of cardiovascular disease Having a history of musculoskeletal diseases Having a history of neurological and hormonal diseases No history of surgery

Age
From **18 years** old to **30 years** old

Gender
Male

Phase
N/A

Groups that have been masked
- Participant

Sample size
Target sample size: **22**

Randomization (investigator's opinion)
N/A

Randomization description

Blinding (investigator's opinion)
Single blinded

Blinding description
In this study, participants are unaware of the drink assigned to themselves and other participants.

Placebo
Used

Assignment
Crossover

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Islamic Azad University of Medical Sciences, Rasht Branch
Street address
Islamic Azad university of Rasht Branch, Lakan Blv
City
Rasht
Province
Guilan
Postal code
۴۱۴۷۶۵۴۹۱۹
Approval date
2020-10-28, 1399/08/07
Ethics committee reference number
IR.IAU.RASHT.REC.1399.082

Health conditions studied

1

Description of health condition studied
The effect of energy drink consumption on renal and hematological function in young footballers
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Renal function (Urea and Cratinine)
Timepoint
fasting 5 days before the match, before the start of the match, at the end of 90 minutes of the match, and one day after the match
Method of measurement
Using Pars Azmon laboratory kit (made in Iran)

2

Description
Serum level hematological indicators (hemoglobin mass, hematocrit percentage, and red and white blood cell count)
Timepoint
Fasting 5 days before the match, before the start of the match, at the end of 90 minutes of the match, and one day after the match
Method of measurement
Using Pars Azmon laboratory kit (made in Iran)

3

Description
Rated Perceived Exertion
Timepoint
One week before and at the end of a football match
Method of measurement
In order to know the Rated Perceived Exertion caused by a football match, one week before the protocol, people are asked to start a football match warming up in a Field and explain the understand their pressure from playing the game using the Borg pressure perception scale. And finally, perform the main protocol with a speed that is equal to the pressure of score 13.

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Energy drink. All participants will drink 2 hype 250 ml sports drinks daily (morning with breakfast and evening with dinner) for 5 days before the race, before and immediately after the race and 24 hours after the soccer match.
Category
Other

2

Description
Intervention group: placebo. After a two-week break, as in the previous stage, all participants will drink 2 placebo drinks daily (morning with breakfast and evening with evening) for 5 days before the race, before and immediately after the race and 24 hours after the match.
Category
Placebo

Recruitment centers

1

Recruitment center
Name of recruitment center
Masal County Football Board
Full name of responsible person
Komeil Kasi
Street address
Islamic Azad University of Rasht Branch, Lakan Blv
City
Rasht
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Postal code
۴۱۴۷۶۵۴۹۱۹
Phone
+98 13 3342 2153
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adibsaberf@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University
Full name of responsible person
Alireza Seidavi
Street address
Islamic Azad University of Rasht Branch, Lakan Blv
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solomonansari@yahoo.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Islamic Azad University
Proportion provided by this source
100
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Islamic Azad University
Full name of responsible person
Soleyman Ansari
Position
Non-faculty specialist
Latest degree
Ph.D.
Other areas of specialty/work
Sport Medicine
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Islamic Azad University of Rasht Branch, Lakan Blv
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Person responsible for scientific inquiries

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Soleyman Ansari

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
Due to the confidentiality of participants' information
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Not applicable
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Not applicable
Analytic Code
Not applicable
Data Dictionary
Not applicable